

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of invention of Group I, claims 1-12 and species covered by claim 9 filed 8 April 2008 is acknowledged. The traversal is on the ground(s) that "since the examination of the claims of Groups I and II and the examination of the species within claims 6-12 poses no undue burden on the Examiner". This is not found persuasive because the record reflects that all of these groups and species are patentably distinct and have been properly considered.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102 and § 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Trapani (US 6,299,944 B1). Trapani's invention is directed to a method of curing coating compositions. Trapani disclose in the abstract that the method comprises the step as claimed and in col. 4, lines 34-41 that plastic is one of materials for the substrate.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trapani '944. Trapani as applied further discloses the drying of the wet coating as little as 60 seconds (col. 2, lines 53-59) or for two 2 minutes (Example 1A), and the use of commercial microwave for the drying (Example 1A). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Trapani's teachings because it has been settled that proper adjustment of a known effective variable of a known or obvious process is within the capabilities of one having ordinary skill in the art. *In re Aller* 105 USPQ 233; *In re Boesch* 205 USPQ 215.

6. Claim 3 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Trapani '944. Trapani as applied above further discloses the water contained in the coating film must be nearly completely evaporated before the coating is UV-cured (paragraph crossing cols. 1 and 2). Although Trapani does not detail the controlling of the solid content of the wet coating as claimed, Trapani's process of completely evaporating water in the wet coating by microwave appears to lead one of ordinary skill in the art toward the limitation, absence of evidence to the contrary. Further, it has been held that the disclosure in the prior art of any value within the claimed range is an anticipation of that range. And a prima facie case of obviousness exists in the case where the claimed range overlaps range disclosed by the prior art, *In re Wertheim* 191 USPQ 90.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trapani '944 in view of WO 90/02613. Trapani as applied above further discloses in col. 1, lines 7-17 a method of forming a film of a water containing paint on a temperature sensitive substrate and then irradiating the coated substrate with microwave. There, WO 90/02613, teaches that the definition of the term "temperature sensitive substrate" (paragraph crossing cols. 4 and 5). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Trapani's teachings as suggested by WO '613 because if one uses a substrate to be coated such as plastic, one

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has to consider that the surface of the substrate is capable of withstanding the microwave heating conditions, i.e., without overheating the substrate.

8. Claims 1 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 03/016095 wherein its US counterpart US 2004/0175572 A1 is used in the rejection. WO '095's invention is directed to color- and/or effect-producing film and method thereof. WO '095 discloses

- o in paragraph 103 the drying of the color and/or effect film by microwave; and
- o in paragraph 119, the curing of both the color and/or effect film and a clearcoat film.

9. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '572. The difference between WO '572 and the instant claims are the recited subject matter in each of the instant claims.

As to the subject matter of claims 2 and 3, the selection of microwave power, drying time and evaporation of water in the film would have been within the level of ordinary skill in the art as it has been settled that proper adjustment of a known effective variable of a known or obvious process is within the capabilities of one having ordinary skill in the art. *In re Aller* 105 USPQ 233; *In re Boesch* 205 USPQ 215.

As to the subject matter of matter of claim 4, since WO '572 discloses various

substrates to be coated with the film, the selection of any of equivalent substrates would have been within the level of ordinary skill in the art.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '572 in view of WO '613. The difference between WO '572 and the instant claim is the provision of the recited thermal softening point for the plastic substrate. WO '613 teaches in a method of forming a film of a water-containing paint on a temperature sensitive substrate the step of drying the paint by microwave without overheating the substrate (see abstract) and the definition of the term "temperature sensitive substrate (paragraph crossing cols. 4 and 5). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified WO '572's teachings as suggested by WO '613 because if one uses a substrate to be coated such as plastic, one has to consider that the surface of the substrate is capable of withstanding the microwave heating conditions, i.e., without overheating the substrate.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kishor Mayekar/
Primary Examiner, Art Unit 1795